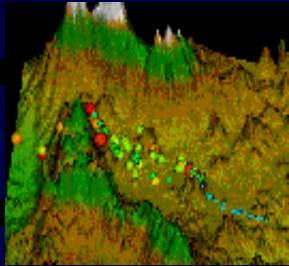


LANL Air Quality Projects



Mexico City

- meteorology
- air chemistry
- emissions
- cost-benefit analysis



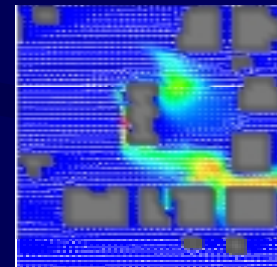
Los Angeles, CA

- meteorology
- air chemistry
- stormwater transport



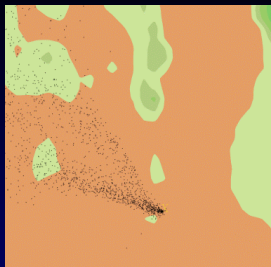
Santiago, Chile

- meteorology
- plume dispersion



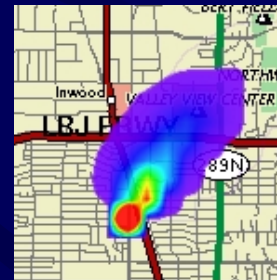
Washington DC

- flow around buildings
- plume dispersion



El Paso/Ciudad Juarez

- meteorology
- plume dispersion



Dallas, TX

- flow around buildings
- meteorology
- plume dispersion
- vehicle exposures

LANL Air Quality Capabilities

△ Meteorological Modeling

- Hotmac
- Rams

△ Dispersion Modeling

- Raptad
- Hypact
- Inpuff
- Plume Meander
- Gaussian Plume

△ Computational Fluid Dynamics Modeling

- Gasflow
- Higrad

△ Air Chemistry Modeling

- UAM-V
- CIT

△ Emissions Modeling

- Mobile 5
- Transims

△ Strategic Evaluation

- Cost-benefit Analysis
- Decision Tree
- Linear Programming
- Non-linear Programming

Applications

△ Air Pollution and Smog in Cities

- health concerns
- reduction strategies
- visibility issues

△ Air Pollution (Plume) Transport from Factories and Powerplants

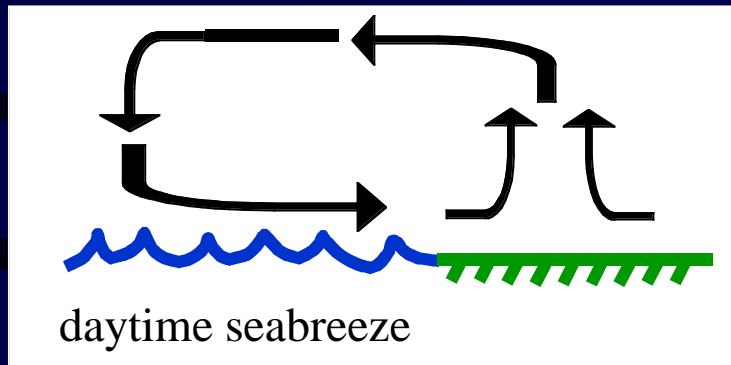
- health concerns
- reduction strategies
- visibility issues

△ Accidental Releases from Industrial, Nuclear, and Military Facilities

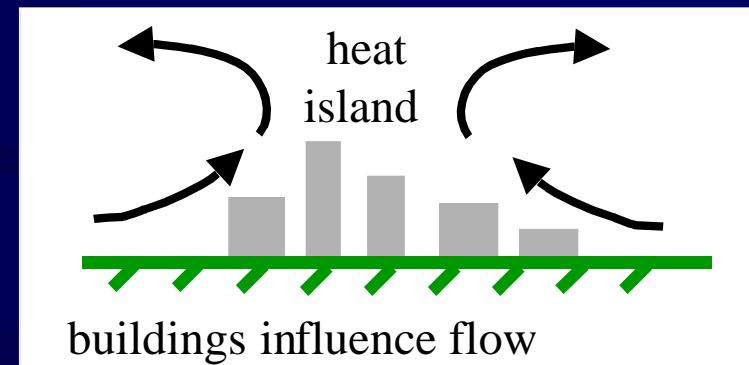
- emergency response
- planning and preparation

Special Meteorological Considerations

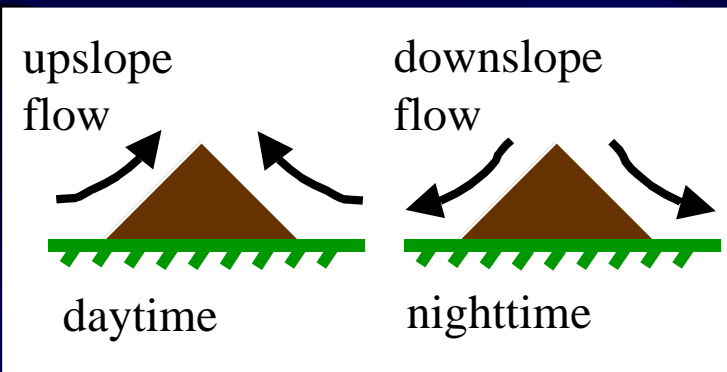
△ coastal city



△ urban



△ mountainous terrain



△ lack of met. data

